

**MR-1 CHECK OFF LIST FOR NON-CATEGORICAL COMPANIES**

**ST. MARY'S HOSPITAL**  
**350 BOULEVARD, PASSAIC**

**# 26210045**

**1. Month of OCTOBER 1, 2008 THRU OCTOBER 31, 2008**

- |     |  |                                    |                                       |   |
|-----|--|------------------------------------|---------------------------------------|---|
| 2.  | Is Outlet # (8 digit) Correct?   | <input checked="" type="radio"/> Y | N                                     | N/A                                     |
| 3.  | Is average Total flow-gal.day stated in space provided?                    | <input checked="" type="radio"/> Y | N                                     | N/A                                     |
| 4.  | Is max. Total flow-gal day stated in space provided?                       | <input checked="" type="radio"/> Y | N                                     | N/A                                     |
| 5.  | Is method used to calculate water stated?                                  | <input checked="" type="radio"/> Y | N                                     | N/A                                     |
| 6.  | Are number of working days stated?   | <input checked="" type="radio"/> Y | N                                     | N/A                                     |
| 7.  | Are there any parameters which have exceeded PVSC Local Limits?            | <input checked="" type="radio"/> Y | <input checked="" type="checkbox"/> N | N/A                                     |
| 8.  | Is proper compliance/non-compliance statement provided?                    | <input checked="" type="radio"/> Y | N                                     | N/A                                     |
| 9.  | Have correct number of samples been submitted?                             | <input checked="" type="radio"/> Y | N                                     | N/A                                     |
| 10. | Has PHC result been listed on MR-1 report?                                 | Y                                  | <input checked="" type="radio"/> N    | <input checked="" type="checkbox"/> N/A |
| 11. | Has sample number been reported in space provided?                         | <input checked="" type="radio"/> Y | N                                     | N/A                                     |
| 12. | Have all regulated parameters been listed on MR-1?                         | <input checked="" type="radio"/> Y | N                                     | N/A                                     |
| 13. | Has sample type been stated on MR-1?                                       | <input checked="" type="radio"/> Y | N                                     | N/A                                     |
| 14. | Have all samples been taken during this reporting period?                  | <input checked="" type="radio"/> Y | N                                     | N/A                                     |
| 15. | Has NJDEPE certified lab been used?  | <input checked="" type="radio"/> Y | N                                     | N/A                                     |
| 16. | Have analytical results been submitted on copies of Laboratory stationery? | <input checked="" type="radio"/> Y | N                                     | N/A                                     |
| 17. | Have results been written in space designated on MR-1?                     | <input checked="" type="radio"/> Y | N                                     | N/A                                     |
| 18. | Is correct method used to preserve samples stated on MR-1?                 | <input checked="" type="radio"/> Y | N                                     | N/A                                     |
| 19. | Has MR-1 been signed by authorized representative?                         | <input checked="" type="radio"/> Y | N                                     | N/A                                     |
| 20. | Has information been submitted on proper MR-1 form?                        | <input checked="" type="radio"/> Y | N                                     | N/A                                     |
| 21. | Remove Arsenic from report if sampling not required                        | <input checked="" type="radio"/> Y | N                                     | N/A                                     |

## MR-1 CHECK OFF LIST FOR NON-CATEGORICAL COMPANIES

First Reviewer: comments on deficiencies

*Complete*Date Reviewed 12/1/08 Date sent to user \_\_\_\_\_

Date due back \_\_\_\_\_ Reviewer

*J. J. Anderson*

Second review comments on deficiencies

Date Reviewed \_\_\_\_\_ Date sent to user \_\_\_\_\_

Date due back \_\_\_\_\_ Reviewer \_\_\_\_\_

Date \_\_\_\_\_ Reviewer \_\_\_\_\_

NOV 21 2008

## NAME : ST. MARY'S HOSPITAL

MAILING ADDRESS: 350 Boulevard, Passaic, NJ 07055

FACILITY LOCATION: 350 Boulevard, Passaic, NJ 07055

CATEGORY & SUBPART: 460

OUTLET #: 1

CONTACT OFFICIAL: Mr. Martin Romanik

TELEPHONE #: (973) 365-5134

NEW CUSTOMER ID/ OUTLET ID: 26210045

OLD OUTLET DESIGNATION: 26210003

Regulated Flow-gal/day	
Total Flow-gal/day	

**Average**

**Maximum**

N/A

N/A

217,627

239,390

Method Used: Meter Readings Divided by **31** days.

Production Rate (if applicable)

[illegible]

Certification of Non-use if applicable (use additional sheets): N/A

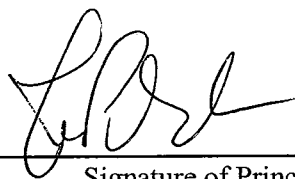
NOV 21 2008

Compliance or non-compliance statement with compliance schedule (use additional sheets if necessary for every parameter used. PBI Regional Medical Center Hospital is in compliance with the PVSC local limits

Explain Method for preserving samples: Laboratory preserved with 5ml nitric acid to a pH of <2

**I certify under penalty of law that this document and attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.**

403.6(a)(2)(ii) revised by 53 FR 40610, October 17, 1988



\_\_\_\_\_  
Signature of Principal  
Executive or Authorized Agent

Joseph W. Pilewski

Vice President, Enviro-Sciences (OF DELAWARE), Inc  
Type Name and Title

\_\_\_\_\_  
19-Nov-08  
Date

Water Discharge Calculation Sheet

ST. MARY'S HOSPITAL (PBI)

OCTOBER 2008

Total water used from meter reading (Cubic feet)	949,400
x 7.48 (gallons / cubic foot)	
Total Usage (Gallons)	7,101,512
Evaporation (Gallons) 5% evaporation *	355,076
Volume Discharged (Gallons)	6,746,436

Volume Discharged For Month	
Daily Average Discharge (Gallons)	217,627
Daily Maximum Discharge (Gallons)	239,390

Month 10  
Last day 31

\* NOTE: In the months of January, February and March the PVSC DOES NOT ALLOW a reduction for evaporation.

70027224	70027225	70029946	60144298			
<u>Meter 1</u>	<u>Meter 2</u>	<u>Meter 3</u>	<u>Meter 4</u>	<u>Total</u>	<u>x 100</u>	<u>x 7.48</u>
2,557	4,952	1,615	370	9,494	949,400	7,101,512

	<u>Reading Date</u>		<u>CF1</u>	<u>CF2</u>	<u>Consumption (100 cu.ft.)</u>
Meter 1	11/10/08		9,103.00	1,587.00	
	10/10/08		<u>7,546.00</u>	<u>1,577.00</u>	
		C - L	1,557.00	10.00	
			<u>x 1</u>	<u>x 100</u>	
			1,557.00	1,000.00	2,557.00
Meter 2	11/10/08		5,336.00	1,323.00	
	10/10/08		<u>3,684.00</u>	<u>1,290.00</u>	
		C - L	1,652.00	33.00	
			<u>x 1</u>	<u>x 100</u>	
			1,652.00	3,300.00	4,952.00
Meter 3	11/10/08		6,021.00	7,758.00	
	10/10/08		<u>4,826.00</u>	<u>7,716.00</u>	
		C - L	1,195.00	42.00	
			<u>x 1</u>	<u>x 10</u>	
			1,195.00	420.00	1,615.00
Meter 4	11/10/08		2,369.00		
	10/10/08		<u>2,332.00</u>		
		C - L	37.00		
			<u>x 10</u>		
			370.00		370.00



**ANALYTICAL DATA REPORT**

ESI, INC.  
111 Howard Blvd  
Suite 108  
Mount Arlington, NJ 07856

Project Name: **ST. MARY'S HOSPITAL (PB1) - R8MM**  
IAL Case Number: **E08-11351**

These data have been reviewed and accepted by:

A handwritten signature in black ink, appearing to read 'Michael Leftin', written over a horizontal line.

Michael H. Leftin, Ph.D.  
Laboratory Director

273 Franklin Road  
Randolph, NJ 07869  
Phone: 973 361 4252  
Fax: 973 989 5288



IAL is a NELAC New Jersey Certified Lab (14751) and maintains certification in Connecticut (PH-0699), New York (11402), Rhode Island (00126), Pennsylvania (68-00773) and in the Department of Navy IR QA Program

## Sample Summary

**IAL Case No.****E08-11351****Client** ESI, INC.**Project** ST. MARY'S HOSPITAL (PB1) - R8MM**Received On** 10/ 2/2008@11:00

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Depth Top/Bottom</u>	<u>Sampling Time</u>	<u>Matrix</u>	<u># of Container</u>
11351-001	SMP-1008	n/a	10/ 1/2008@11:20	Aqueous	1

**INTEGRATED ANALYTICAL LABORATORIES, LLC.****TABLE OF CONTENTS**

	<u>Page</u>
Qualifiers	1
Conformance / NonConformance Summary	2
Laboratory Deliverables Check List	3
Metal NonConformance Summary	4
Summary Report	5
Analytical Results	
Metals	6
Methodology Summary *	
Quality Control	
Metals	7
Method Blank Results Summary	
Calibration Summary	
Spike Sample Results Summary	
Duplicate Sample Results Summary	
Sample Tracking	
Chains of Custody	16
Laboratory Chronicle	19

\* Methodology is included in the IAL Project Information Page



**INTEGRATED ANALYTICAL LABORATORIES, LLC.****MATRIX QUALIFIERS**

- A -** Indicates the sample is an Aqueous matrix.
- O -** Indicates the sample is an Oil matrix.
- S -** Indicates the sample is a Soil, Sludge or Sediment matrix.
- X -** Indicates the sample is an Other matrix as indicated by Client Chain of Custody.

**DATA QUALIFIERS**

- B -** Indicates the analyte was found in the Blank and in the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of the analyte.
- C -** Common Laboratory Contaminant.
- D -** The compound was reported from the Diluted analysis.
- D.F. -** Dilution Factor.
- E -** Estimated concentration, reported results are outside the calibrated range of the instrument.
- J -** Indicates an estimated value. The compound was detected at a value below the method detection limit but greater than zero. For GC/MS procedures, the mass spectral data meets the criteria required to identify the target compound.
- MDL -** Method Detection Limit.
- MI -** Indicates compound concentration could not be determined due to Matrix Interferences.
- NA -** Not Applicable.
- ND -** Indicates the compound was analyzed for but Not Detected at the MDL.

**REPORT QUALIFIERS**

All solid sample analyses are reported on a dry weight basis.

All solid sample values are corrected for original sample size and percent solids.

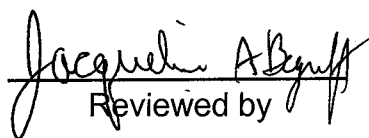
- Q -** Qualifier

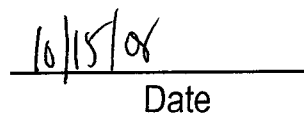
**INTEGRATED ANALYTICAL LABORATORIES, LLC.****CONFORMANCE / NONCONFORMANCE SUMMARY**

Integrated Analytical Laboratories, LLC. received one (1) aqueous sample(s) from ESI, INC.  
(Project: ST. MARY'S HOSPITAL (PB1) - R8MM) on October 2, 2008 for the analysis of:

- (1) Metal - Copper
- (1) Metal - Zinc

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

  
Reviewed by

  
Date

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

## LABORATORY DELIVERABLES CHECK LIST

Lab Case Number: E08-11351

	Check If Complete
1. Cover Page, Title Page listing Lab Certification #, facility name & address and date of report preparation.	<u>✓</u>
2. Table of Contents.	<u>✓</u>
3. Summary Sheets listing analytical results for all targeted and non-targeted compounds.	<u>✓</u>
4. Summary Table cross-referencing Field ID's vs. Lab ID's.	<u>✓</u>
5. Document bound, paginated and legible.	<u>✓</u>
6. Chain of Custody.	<u>✓</u>
7. Methodology Summary.	<u>✓</u>
8. Laboratory Chronicle and Holding Time Check.	<u>✓</u>
9. Results submitted on a dry weight basis (if applicable).	<u>✓</u>
10. Method Detection Limits.	<u>✓</u>
11. Lab certified by NJDEP for parameters or appropriate category of parameters or a member of the USEPA CLP.	<u>✓</u>
12. NonConformance Summary.	<u>✓</u>

Josephine A. DeLuca  
QC Reviewed by

10/16/08  
Date

**INTEGRATED ANALYTICAL LABORATORIES  
CONFORMANCE/NONCONFORMANCE SUMMARY  
METAL ANALYSIS**

Lab Case Number: E08-11351

	<u>No</u>	<u>Yes</u>
1. Calibration Summary Meet Criteria.	<u>          </u>	<u>✓</u>
2. ICP Interference Check Sample Results Meets Criteria (if applicable)	<u>          </u>	<u>NA</u>
3. Serial Dilution/Post Spike Summary Submitted (if applicable) / Meets Criteria	<u>          </u>	<u>✓</u>
4. Internal Standards Meet Criteria (if applicable)	<u>          </u>	<u>✓</u>
5. Laboratory Control Sample Summary Submitted (if applicable) / Meets Criteria	<u>          </u>	<u>✓</u>
6. Blank Contamination: If yes, list compounds and concentrations in each blank:	<u>✓</u>	<u>          </u>
<hr/>		
7. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria. (If not, list those compounds and their recoveries which fall outside the acceptable range).	<u>          </u>	<u>✓</u>
8. Extraction Holding Time Met. If not, list number of days exceeded for each sample:	<u>          </u>	<u>✓</u>
<hr/>		
9. Analysis Holding Time Met. If not, list number of days exceeded for each sample:	<u>          </u>	<u>✓</u>

**Additional Comments:**

Sample(s) used for aqueous metals analyses contained varying levels of sediment. Precautions were taken to use an aqueous representative of the sample. However, our experience has demonstrated that samples of this nature are very difficult to duplicate because the metals numbers are basically tied into the level of sediment present in the original sample. Additionally, as the remainder of the sample is stored under acidic conditions, some of the metals may continue to leach out into the water making any reproduction of the original number impossible. The rough amount of sediment present in the samples is as follows:

11351-001: Trace

  
Inorganic Manager

October 9, 2008  
Date

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

## SUMMARY REPORT

Client: ESI, INC.

Project: ST. MARY'S HOSPITAL (PB1) - R8MM

Lab Case No.: E08-11351

Lab ID:	11351-001
Client ID:	SMP-1008
Matrix:	Aqueous
Sampled Date	10/1/08
PARAMETER(Units)	Conc    Q    MDL
Metals (Units)	(mg/L-ppm)
Copper	0.105    0.008
Zinc	0.036    0.008

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

## METALS

Client/Project: ESI/ST. MARY'S HOSPITAL (PB1) - R8MM

Lab ID: E08-11351-001

Client ID: SMP-1008

Date Received: 10/02/08 11:00

Matrix-Units: Aqueous-mg/L (ppm)

% Moisture: 100

Batch #: 443

Compound	Result	Q	DF	MDL	Date Analyzed	Method
Copper	0.105		1	0.008	10/07/08	200.8
Zinc	0.036		1	0.008	10/07/08	200.8

E08-11351

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS QUALITY CONTROL****BLANK 1 RESULTS SUMMARY**

Batch (Page) #: 443  
 Associated Lab 11108, 11219, 11242, 11338, 11339, 11348, 11349, 11350, 11414, 11416  
 Case for Blank 1: 11283, 11284, 11308, 11318, 11351, 11388

Matrix: Aqueous

Unit: ppb (µg/L)

Method: 200.8/200.7

ANALYTE	SAMPLE MDL	REAGENT BLANK
Arsenic	2.00	ND
Cadmium	1.00	ND
Chromium	8.00	ND
Copper	8.00	ND
Iron	100	ND
Lead	2.00	ND
Magnesium	200	ND
Manganese	4.00	ND
Mercury	0.500	ND
Nickel	4.00	ND
Selenium	8.00	ND
Silver	2.00	ND
Zinc	8.00	ND

Associated Sample for Blank 1:

11108-001; 11219-001; 11242-001; 11338-001  
 11339-001; 11348-001; 11349-001; 11350-001  
 11414-001; 11416-001; 11283-006; 11284-001~004  
 11308-001; 11318-001,004; 11351-001; 11388-001

E08-11351

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS QUALITY CONTROL****INITIAL & CONTINUING CALIBRATION BLANKS VERIFICATION**

Batch (Page) #: 443

Lab Case: 11108, 11219, 11242, 11283, 11284, 11308, 11318, 11338, 11339, 11348, 11349, 11350  
11351, 11388, 11414, 11416Matrix: AqueousMethod: 200.8/200.7Concentration/Units: ppb (µg/L)

ANALYTE	INST. MDL	ICB	CCB	CCB	CCB	CCB	CCB
Arsenic	0.500	ND	ND	ND	ND	ND	ND
Cadmium	0.250	ND	ND	ND	ND	ND	ND
Chromium	2.00	ND	ND	ND	ND	ND	ND
Copper	2.00	ND	ND	ND	ND	ND	ND
Iron	50.0	ND	ND				
Lead	0.500	ND	ND	ND	ND	ND	ND
Magnesium	100	ND	ND				
Manganese	1.00	ND	ND	ND	ND	ND	ND
Mercury	0.250	ND	ND	ND			
Nickel	1.00	ND	ND	ND	ND	ND	ND
Selenium	2.00	ND	ND	ND	ND	ND	ND
Silver	0.500	ND	ND	ND	ND	ND	ND
Zinc	2.00	ND	ND	ND	ND	ND	ND



E08-11351

INTEGRATED ANALYTICAL LABORATORIES, LLC.

# **METALS QUALITY CONTROL** **INITIAL & CONTINUING CALIBRATION VERIFICATION**

Batch (Page) #: 443

 Lab Case: 11108, 11219, 11242, 11283, 11284, 11308, 11318, 11338, 11339, 11348, 11349, 11350  
 11351, 11388, 11414, 11416

 Matrix: Aqueous Method: 200.8/200.7 Units: ppb (ug/L)

ANALYTE	INST. MDL	ICV & CCV TRUE	ICV		CCV		CCV		CCV	
			FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.500	20.0	20.6	103	19.6	98.0	19.6	98.0	19.1	95.5
Cadmium	0.250	10.0	10.2	102	9.51	95.1	9.68	96.8	9.21	92.1
Chromium	2.00	20.0	18.3	91.5	18.3	91.5	18.4	92.0	18.6	93.0
Copper	2.00	50.0	49.0	98.0	50.2	100	49.5	99.0	47.9	95.8
Iron	50.0	10000	10800	108	10700	107				
Lead	0.500	10.0	9.60	96.0	9.48	94.8	9.27	92.7	9.17	91.7
Magnesium	100	10000	10800	108	10600	106				
Manganese	1.00	30.0	28.1	93.7	29.1	97.0	28.7	95.7	29.0	96.7
Mercury	0.250	5.00	4.93	98.6	4.98	99.6	4.99	99.8		
Nickel	1.00	80.0	76.1	95.1	78.0	97.5	76.9	96.1	73.4	91.8
Selenium	2.00	10.0	10.6	106	9.63	96.3	9.57	95.7	9.58	95.8
Silver	0.500	20.0	18.9	94.5	19.1	95.5	18.5	92.5	18.7	93.5
Zinc	2.00	40.0	38.9	97.3	40.9	102	40.0	100	39.6	99.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

E08-11351

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS QUALITY CONTROL**  
**INITIAL & CONTINUING CALIBRATION VERIFICATION**

Batch (Page) #: 443

 Lab Case: 11108, 11219, 11242, 11283, 11284, 11308, 11318, 11338, 11339, 11348, 11349, 11350  
 11351, 11388, 11414, 11416

 Matrix: Aqueous Method: 200.8/200.7 Units: ppb (ug/L)

ANALYTE	INST. MDL	ICV & CCV TRUE	CCV		CCV					
			FOUND	% R	FOUND	% R	FOUND	% R	FOUND	% R
Arsenic	0.500	20.0	19.4	97.0	20.8	104				
Cadmium	0.250	10.0	9.32	93.2	9.03	90.3				
Chromium	2.00	20.0	19.0	95.0	18.8	94.0				
Copper	2.00	50.0	49.0	98.0	49.8	99.6				
Lead	0.500	10.0	9.37	93.7	9.25	92.5				
Manganese	1.00	30.0	29.5	98.3	31.5	105				
Nickel	1.00	80.0	75.4	94.3	76.9	96.1				
Selenium	2.00	10.0	9.78	97.8	9.87	98.7				
Silver	0.500	20.0	18.6	93.0	19.0	95.0				
Zinc	2.00	40.0	41.4	104	43.8	110				

(1) Control Limits: Mercury 80-120; Other Metals 90-110

E08-11351

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS QUALITY CONTROL****SPIKE SAMPLE RECOVERY**

Batch (Page) #: 443

Lab Case: 11108, 11219, 11242, 11338, 11339, 11348, 11349, 11350, 11414, 11416

11283, 11284, 11308, 11318, 11351, 11388

Matrix: AqueousConcentration/Units: ppb (µg/L)

ANALYTE	SSR1	SR1	%R1	SA1	SSR2	SR2	%R2	SA2	CONTROL LIMIT %R
Arsenic	359	ND	89.8	400					75-125
Cadmium	348	ND	87.0	400	340	ND	85.0	400	75-125
Chromium	369	ND	92.3	400					75-125
Copper	388	ND	97.0	400	364	ND	91.0	400	75-125
Iron	8180	216	99.6	8000					75-125
Lead	386	ND	96.5	400	387	ND	96.8	400	75-125
Magnesium	10600	2480	102	8000					75-125
Manganese					857	464	98.3	400	75-125
Mercury	9.76	ND	97.6	10.0	9.68	ND	96.8	10.0	75-125
Nickel	384	ND	96.0	400	382	10.7	92.8	400	75-125
Selenium	335	ND	83.8	400					75-125
Silver	376	ND	94.0	400					75-125
Zinc	373	19.2	88.5	400	369	20.7	87.1	400	75-125

SSR = Spike Sample Result

SA = Spike Added

NC = Non-calculable % R; Sample concentration &gt; 4 x Spike Concentration.

SR = Sample Result

%R = Percent Recovery

QC Sample 1 11219-001

QC Sample 1 for following samples:

11108-001; 11219-001; 11242-001; 11338-001

11339-001; 11348-001; 11349-001; 11350-001

11414-001; 11416-001

QC Sample 2 11318-004

QC Sample 2 for following samples:

11283-006; 11284-001~004; 11308-001; 11318-001,004

11351-001; 11388-001

E08-11351

INTEGRATED ANALYTICAL LABORATORIES, LLC.

### METALS QUALITY CONTROL DUPLICATE SAMPLE RECOVERY

Batch (Page) #: 443

Lab Case: 11108, 11219, 11242, 11338, 11339, 11348, 11349, 11350, 11414, 11416

11283, 11284, 11308, 11318, 11351, 11388

Matrix: AqueousConcentration/Units: ppb (µg/L)

ANALYTE	CONTROL LIMIT 1	S1	D1	RPD1	CONTROL LIMIT 2	S2	D2	RPD2
Arsenic	NA	ND	ND	NC				
Cadmium	NA	ND	ND	NC	NA	ND	ND	NC
Chromium	NA	ND	ND	NC				
Copper	NA	ND	ND	NC	NA	ND	ND	NC
Iron	20	216	222	2.74				
Lead	NA	ND	ND	NC	NA	ND	ND	NC
Magnesium	20	2480	2600	4.72				
Manganese					20	464	458	1.30
Mercury	NA	ND	ND	NC	NA	ND	ND	NC
Nickel	NA	ND	ND	NC	20	10.7	10.2	4.78
Selenium	NA	ND	ND	NC				
Silver	NA	ND	ND	NC				
Zinc	20	19.2	18.7	2.64	20	20.7	18.9	9.09

S1 = Sample 1

D1 = Duplicate 1

NA = Not Applicable

NC = Non-calculable RPD due to result (s) less than the detection limit.

QC Sample 1 11219-001

QC Sample 1 for following samples:

11108-001; 11219-001; 11242-001; 11338-001

11339-001; 11348-001; 11349-001; 11350-001

11414-001; 11416-001

S2 = Sample 2

D2 = Duplicate 2

QC Sample 2 11318-004

QC Sample 2 for following samples:

11283-006; 11284-001-004; 11308-001; 11318-001,004

11351-001; 11388-001

E08-11351

INTEGRATED ANALYTICAL LABORATORIES, LLC.

# **METALS QUALITY CONTROL** **LABORATORY CONTROL SAMPLE**

Batch (Page) #: 443

 Lab Case: 11108, 11219, 11242, 11283, 11284, 11308, 11318, 11338, 11339, 11348, 11349, 11350  
 11351, 11388, 11414, 11416
Matrix: AqueousUnit: ppb (µg/L)

ANALYTE	BSW1			BSW2		
	TRUE	FOUND	%R(1)	TRUE	FOUND	%R(1)
Arsenic	400	364	91.0			
Cadmium	400	361	90.3			
Chromium	400	359	89.8			
Copper	400	377	94.3			
Iron	8000	8610	108			
Lead	400	356	89.0			
Magnesium	8000	8250	103			
Manganese	400	368	92.0			
Mercury	10.0	9.87	98.7			
Nickel	400	367	91.8			
Selenium	400	370	92.5			
Silver	400	364	91.0			
Zinc	400	388	97.0			

(1) Control Limits % Recovery = 85-115%

BSW1BSW211108-001; 11219-001; 11242-001; 11338-00111339-001; 11348-001; 11349-001; 11350-00111414-001; 11416-001; 11283-006; 11284-001~00411308-001; 11318-001,004; 11351-001; 11388-001

E08-11351

INTEGRATED ANALYTICAL LABORATORIES, LLC.

# **METALS QUALITY CONTROL** **SERIAL DILUTIONS & POST SPIKES 2**

Batch (Page) #: 443

Lab Case: 11283, 11284, 11308, 11318, 11351, 11388

Matrix: AqueousConcentration/Units: ppb (µg/L)

ANALYTE	SERIAL DILUTION		% Difference	POST SPIKE		% Recovery
	SR	SDR		SPR	SA	
Cadmium	ND			335	400	83.8
Copper	ND			354	400	88.5
Lead	ND			381	400	95.3
Manganese	464	465	0.215			
Nickel	10.7			366	400	88.8
Zinc	20.7			362	400	85.3

SR = Sample Result

SDR = Sample Dilution Result

SPR = Sample Post Spike Result

SA = Spike Added

Control Limits: (+) or (-) 10% Difference or 75 - 125% Recovery

QC Sample2 : 11318-004

QC Sample 2 for following samples:

11283-006; 11284-001-004; 11308-001; 11318-001,00411351-001; 11388-001

E08-11351

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS QUALITY CONTROL****IPC**

Batch (Page) #: 443

Lab Case: 11108, 11219, 11242, 11283, 11284, 11308, 11318, 11338, 11339, 11348, 11349, 11350  
11351, 11388, 11414, 11416Matrix: AqueousUnit: ppb (µg/L)

ANALYTE	BSW1		
	TRUE	FOUND	%R(1)
Arsenic	50.0	49.6	99.2
Cadmium	50.0	50.2	100
Chromium	50.0	47.6	95.2
Copper	50.0	50.7	101
Iron	5000	4880	97.6
Lead	50.0	48.2	96.4
Magnesium	5000	5160	103
Manganese	50.0	48.0	96.0
Mercury	2.50	2.44	97.6
Nickel	50.0	49.0	98.0
Selenium	50.0	49.7	99.4
Silver	50.0	48.7	97.4
Zinc	50.0	50.2	100

(1) Control Limits = 95-105%

0015

## CHAIN OF CUSTODY

No. \_\_\_\_\_  
(Lab Use Only)**ENVIRO-SCIENCES, INC.**111 Howard Boulevard, Suite 108  
Mount Arlington, NJ 07856  
Phone: 973-398-8183  
Fax: 973-398-8037CLIENT: **ST. MARY'S HOSPITAL (PBI)**PROJECT NAME: **R8MM**DELIVERABLES: **Reduced Data Deliverables**SEND REPORT TO: **Bob Lawrence** E-Mail: **RLawrenc@Enviro-Sciences.com**

Sample Identification		Sampling Location Point	Sample Date	Sampling Time			Sample Matrix	Sample Type		Analysis Required (code #)	# of Containers
Lab	Field ID				A M	P M		Comp.	Grab		
	SMP-1008	Process Wastewater	10/1/08	11:20			Aqueous	X		12, 19	1

**Note: PVSC Threshold Limits Required**Method of Relinquishment: **Drop Off**Name of Laboratory: **IAL**Relinquished  
By: (Sign): Received  
By: (Sign): Date/Time: **10/2/08 11:00**Relinquished To Lab  
By: (Sign): \_\_\_\_\_Received For Lab  
By: (Sign): \_\_\_\_\_

Date/Time: \_\_\_\_\_

Analysis	Code
Priority Pollutant Metals	01
Petroleum Hydrocarbons	02
Volatile Organics + 15	03
Base Neutrals + 15	04
Acid & Base / Neutrals	05
VO+15 + MTBE / TBA	06
Antimony	07
Arsenic	08
Beryllium	09

Analysis	Code
Cadmium	10
Chromium	11
Copper.....	12
Lead	13
Mercury	14
Nickel	15
Selenium	16
Silver	17
Thallium	18

Analysis	Code
Zinc.....	19

**11351****Note: Report on CD NOT Required**

\\Grove\Shared\Project Files\_NTFRS\_2b3b41cb\Hospital Group\Custody Chains\Monthly\1 month chain SMP.doc, 9/29/2008



## PROJECT INFORMATION

Case No. **E08-11351**Project **ST. MARY'S HOSPITAL (PB1) - R8MM**

<b>Customer</b> ESI, INC.	<b>P.O. #</b>
<b>Contact</b> Bob Lawrence	<b>Received</b> 10/2/2008 11:00
<b>EMAIL</b> rlawrenc@enviro-sciences.com <input checked="" type="checkbox"/> EMail EDDs	<b>Verbal Due</b> 10/16/2008
<b>Phone</b> (973) 398-8183 <b>Fax</b> 1(973) 398-8037	<b>Report Due</b> 10/23/2008
<b>Report To</b>	<b>Bill To</b>
111 Howard Blvd	111 Howard Blvd
Suite 108	Suite 108
Mount Arlington, NJ 07856	Mount Arlington, NJ 07856
Attn: Bob Lawrence	Attn: Bob Lawrence
<b>Report Format</b> <b>Reduced</b>	
<b>Additional Info</b> <input type="checkbox"/> State Form <input type="checkbox"/> Field Sampling <input type="checkbox"/> Conditional VOA	

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Depth Top / Bottom</u>	<u>Sampling Time</u>	<u>Matrix</u>	<u>Unit</u>	<u># of Containers</u>
11351-001	SMP-1008	n/a	10/1/2008@11:20	Aqueous	mg/L	1

<u>Sample #</u>	<u>Tests</u>	<u>Status</u>	<u>QA Method</u>
001	Copper - Cu	Run	200.8
"	Zinc - Zn	Run	200.8

## INTEGRATED ANALYTICAL LABORATORIES, LLC

## SAMPLE RECEIPT VERIFICATION

CASE NO: E 08

11351

CLIENT:

ESI

COOLER TEMPERATURE: 2° - 6°C: ☒

( See Chain of Custody)

Comments

COC: COMPLETE / INCOMPLETE

KEY

☒ = YES/NA  
☒ = NO

- ☒ Bottles Intact
- ☒ no-Missing Bottles
- ☒ no-Extra Bottles

- ☒ Sufficient Sample Volume
- ☒ no-headspace/bubbles in VO's
- ☒ Labels intact/correct
- ☒ pH Check (exclude VO's)<sup>1</sup>
- ☒ Correct bottles/preservative
- ☒ Sufficient Holding/Prep Time<sup>1</sup>

☐ Sample to be Subcontracted

<sup>1</sup> All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY:

INITIAL

MB

DATE

10/07/08

CORRECTIVE ACTION REQUIRED:

YES

(SEE BELOW)

NO

CLIENT NOTIFIED:

YES

Date/ Time:

NO

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY:

INITIAL

MT

DATE

10-3-08

REV 02/05

0010

## Laboratory Custody Chronicle

IAL Case No.

**E08-11351**Client ESI, INC.Project ST. MARY'S HOSPITAL (PB1) - R8MMReceived On 10/ 2/2008@11:00**Department: Metals**

Copper - Cu

11351-001 Aqueous

Prep. Date

10/ 6/08

Analyst

Lisa

Analysis Date

10/ 7/08

Analyst

Helge

Zinc - Zn

-001 Aqueous

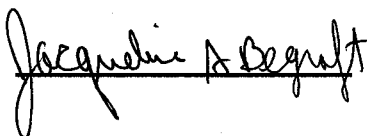
10/ 6/08

Lisa

10/ 7/08

Helge

Review and Approval:



# PROP DOWN BOX

## NON USE CERTIFICATION MONITORING REPORT LOCAL LIMITS

NAME: ST. MARY'S HOSPITAL

MAILING ADDRESS: \_\_\_\_\_

FACILITY LOCATION: PASSAICCATEGORY & SUBPART \_\_\_\_\_ PERMIT # 26210045 OUTLET #: 1

CONTACT OFFICIAL: \_\_\_\_\_ TELEPHONE #: \_\_\_\_\_

have been authorized to certify non-use for the following heavy metals:

Arsenic _____	Lead _____	Zinc _____	SAMPLE DATE			
Cadmium _____	Mercury _____		MONTH	DAY	YEAR	
Chromium _____	Molybdenum _____		10	1	2008	
Copper <u>L</u>	Nickel _____					

PARAMETER		CONCENTRATION			SAMPLE TYPE
		RESULT	THRESHOLD VALUE EXCEEDED YES OR NO	UNITS	COMP/GRAB
Cu	Sample Measurement	0.105	yes	mg/l	Comp.
	Threshold Value	0.092		1	
	Sample Measurement				
	Threshold Value				
	Sample Measurement				
	Threshold Value				
	Sample Measurement				
	Threshold Value				
	Sample Measurement				
	Threshold Value				
	Sample Measurement				
	Threshold Value				
	Sample Measurement				
	Threshold Value				
	Sample Measurement				
	Threshold Value				

PVSC Form MR-3 10/96

SB